

PATENT APPLICATION PO-6657 LeA 34,814

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION OF

GROUP NO.:

1711

KARL-HEINZ DÖRNER ET AL

SERIAL NUMBER: 10/047,365

EXAMINER:

T.T.TRAN

FILED: JANUARY 14, 2002

TITLE: SOLAR MODULES WITH A

TRANSPARENT POLYURETHANE FRONT SIDE AND A PROCESS

FOR PRODUCING SAME

U.S. PATENT NUMBER: 7,049,803 B2

MAY 23, 2006 DATE ISSUED:

LETTER

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir: Patentees wish to place the enclosed document with the prosecution history of the subject patent. Accordingly, enclosed is a copy of the following document

DE 100 48 034 A1 Zenit Energietechnik GMBH

05/08/02

(Abstract attached)

It is believed that this document may be of interest to any member of the general public examining the subject file.

Respectfully submitted,

Bayer MaterialScience LLC

100 Bayer Road

Pittsburgh, Pennsylvania 15205-9741

412) 777-3843

FAĆSIMILE PHONE NUMBER:

(412) 777-3902 s:\bsh\LMW0904 Lyndanne M. Whalen

Attorney for Patentees Reg. No. 29,457

# POWERED BY Dialog

Glass-less flexible solar laminate used on roofs and facades has a permanently elastic self adhesive layer on its rear side in which flat electrical lines for connecting to a roof or facade and additional lines for wiring are embedded

Patent Assignee: ZENIT ENERGIETECHNIK GMBH; CIS SOLAR PROD GMBH & CO KG

**Inventors:** KALBERLAH K

### **Patent Family**

Patent Number	Kind	Date	<b>Application Number</b>	Kind	Date	Week	Type
EP 1191605	A2	20020327	EP 2001250338	A	20010926	200244	В
DE 10048034	<b>A</b> 1	20020508	DE 10048034	A	20000926	200244	

Priority Applications (Number Kind Date): DE 10048034 A ( 20000926)

#### **Patent Details**

Patent Kind		Language	Page	Main IPC	Filing Notes				
EP 1191605	A2	G	6	H01L-031/048					
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR									
DE 10048034	A1			H01L-031/048					

#### **Abstract:**

EP 1191605 A2

NOVELTY Glass-less flexible solar laminate has a permanently elastic self adhesive layer on its rear side in which flat electrical lines (5) for connecting to a roof or facade and additional lines (6) for wiring are embedded.

USE Used on roofs and facades for converting daylight into electrical energy.

ADVANTAGE The laminate can be easily installed.

DESCRIPTION OF DRAWING(S) The drawing shows a cross-section through the solar laminate.

Rubber adhesive (2)

Foam (4)

Flat electrical lines (5)

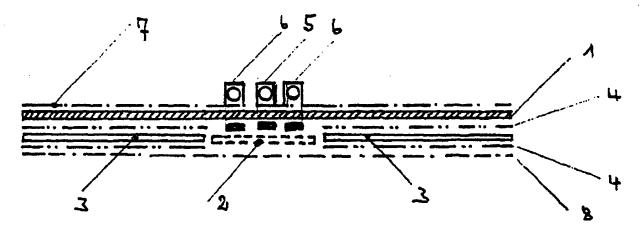
Additional lines (6)

pp; 6 DwgNo 1/2

## **Technology Focus:**

TECHNOLOGY FOCUS - POLYMERS - Preferred Features: The self adhesive layer consists of two adhesive systems. A third adhesive system is also present as an acrylic-foam adhesive strip.

Preferred Materials: The adhesive systems are made of butyl rubber adhesive (2) and a foam (4) coated on both sides with acrylate adhesive.



Derwent World Patents Index © 2005 Derwent Information Ltd. All rights reserved. Dialog® File Number 351 Accession Number 14586740